

MESSINEVA, N.A.; KARASEVA, Ye.V. (Moskva)

Laboratory differentiation of hemorrhagic states. Klin.med. 40  
no.10:99-104 0 '62. (MIRA 15:12)

1. Iz laboratorii klinicheskoy biokhimii (zav. N.A.Messineva)  
TSentral'nogo ordena Lenina instituta gematologii i perelivaniya  
krovi Ministerstva zdravookhraneniya SSSR (dir. - dotsent A.Ye.  
Kiselev).

(HEMOPHILIA)

POLYANSKAYA, A.M.; VORONINA, N.; ZIL'BERMAN, G.A.; MELNIKOVA, N.A. [deceased]

Changes in the blood serum proteins in chronic lymphoid leukaemia.  
Probl. gemat. i seral. krovi no.3:3-8 '65.

(MIRA 18:10)

1. Gematologicheskaya klinika (zav. - prof. M.S. Gal'tsin) i  
klinicheskaya laboratoriya (zav. N.A. Messineva [deceased])  
Tsentral'nogo ordena Lenina instituta gematologii i transfuziologii  
krovi (direktor - dotsent A.Ye. Kiselev) Ministerstva zdravookh-  
raneniya SSSR, Moskva.

L 62738-65 EWT(1)/EPA(s)-2/EWT(m)/EPF(n)-2/T-2/EWP(t)/EWP(b)/ETC(m) JD/m  
ACCESSION NR: AP5021404 CZ/0034/64/600/012/0851/0857

33  
B

AUTHOR: Messing, Theodor (Doctor, Engineer)  
55, 97

TITLE: Steam jet vacuum pumps and their application in vacuum degassing

SOURCE: Hutnicke listy, no. 12, 1964, 851-857

TOPIC TAGS: vacuum pump, vacuum degassing, steel

Abstract [Author's English summary]: Importance of steam jet vacuum pumps in degassing of steel is discussed. Description of design parameters is presented, and guidance given for estimating efficiency and steam requirements. Principles covering the selection of dimensions of the jets, and the selection and arrangement of stages in a multistage unit are discussed on the basis of basic energy equations. Practical operation of steam jets, mainly in degassing plants is evaluated. Construction

Card 1/2

L 62738-65

ACCESSION NR: AP5021404

details, suitable energy sources, and required capacities of the units are discussed. Orig. art. has: 8 formulas, 3 figures, 5 graphs, 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IE

NR REF SOV: 000

OTHER: 000

JPRS

Card

2/2

GULYAYEV, P., doktor biolog. nauk; AYRAPETYANTS, M. kand.med.nauk;  
IVANITSKIY, A., kand. med. nauk; SARADZHEV, N.; NOVAK, V., vrach;  
MESSING, Vol'f

Thought transference. Tekh.mol. no.1:28-32 '61. (MIRA 14:3)

1. Zaveduyushchiy laboratoriyey fiziologicheskoy kibernetiki  
Leningradskogo univ-ersiteta (for Gulyayev). 2. Institut vysshey  
nervnoy deyatel'nosti Akademii nauk SSSR (for Ayrapetyants, Ivanit-  
skiy). 3. Institut normal'noy i patologicheskoy fiziologii  
Akademii meditsinskikh nauk SSSR (for Saradzhev).  
(THOUGHT TRANSFERENCE)

*MIRAS V.A.*  
MISSING, V.A., kand.med.nauk

Acute erythroblastosis. Klin.med. 35 [1.9.34] no.1 Supplement:25  
Ja '57. (MIRA 11:2)

1. Iz 2-y terapevticheskoy kliniki (zav. - prof. N.A.Al'bov)  
Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo  
instituta.  
(BLOOD--DISEASES)

MESSINGER, Gezane, förfőző

Analysis of price formation in the field of constructing apartment houses. Epites szemle 8 no. 2:61-63 '64.

1. Epitesugyi Miniszterium Lakaspolitikai Főosztalya.

MESSINOVA, O. V.

"Nucleic Acid Diffusion and the Morphology of Atresia Processes in a Chicken Ovary." Cand Med Sci, Kazan' State Medical Inst, Kazan', 1954. (RZhBiolKhim, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)  
SO: S um. No. 556, 24 Jun 55

VYL.GZHANIN, N.I., dozent; MELNIKOVA, N.I.; ... YAKOVA,  
 S.G.; KRAYKINSON, N.M.; KIRILLOVA, ... SIGAL, M.S., dozent;  
 GOL'DSHTEIN, D.Ye.; ... LEBEVA, ... dozent; B... I.L.,  
 dozent; RYTRIN, Yu A., ... DIL'DEV, ... P...-  
 YAKOVA, A.S.;

Conference of physicians of the city of Kuznetsov ... the  
 results of the ... International ...  
 Kuz. ... no. ...

MESSINOVA, O.V.; YUSUPOVA, D.V.; SHAMSUTDINOV, N.S.;

Deoxyribonuclease activity in corynebacterium and its  
relation to toxigenicity. Zhur. mikrobiol., epid. i  
immun. 40 no.1:20-25'63. (MIRA 16:10)

1. Iz Kazanskogo gosudarstvennogo universiteta i Kazanskogo  
meditsinskogo instituta.

MESSINOVA, O.V.; SHAROVSKAYA, V.N.; MUKHITDINOVA, R.G.; YUSUPOVA, D.V.; BENING,  
G.P.

Deoxyribonuclease activity of *Corynebacterium diphtheriae* PW-8.  
Zhur. mikrobiol., epid. i immun. 40 no.11:12-15 N '63.

(MIRA 17:12)

1. Iz Kazanskogo gosudarstvennogo universiteta i Kazanskogo instituta  
epidemiologii i mikrobiologii.

ACC NR: AP6034520

SOURCE CODE: UR/0016/66/000/010/0054/0058

AUTHOR: Mulhin, I. V.; Firsova, K. F.; Messinova, O. V.

ORG: Kazan University im. Ul'yanov-Lenin (Kazanskiy universitet);  
Kazan Institute for Postgraduate Medicine (Kazanskiy institut  
usovershenstvovaniya vrachey)

TITLE: Some data on desoxyribonucleases of pathogenic Clostridia

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 10,  
1966, 54-58

TOPIC TAGS: bacteria, bacterial genetics, desoxyribonuclease, Cl.  
septicum, Cl. perfringens, enzyme, chromatography

ABSTRACT: Synthesis and some properties of desoxyribonucleases of  
pathogenic *Clostridia* were studied. The enzymes of five  
*Cl. septicum* and 45 *Cl. perfringens* strains were studied  
using Jeffris' dish method and the Ostwald microviscosimeter.  
Changes in enzyme accumulation were studied according to  
the phases of microbial population development. Enzyme  
synthesis was greatest during the logarithmic growth phase,

Card 1/2

UDC: 576.851.55.06.098.31:577.155.2

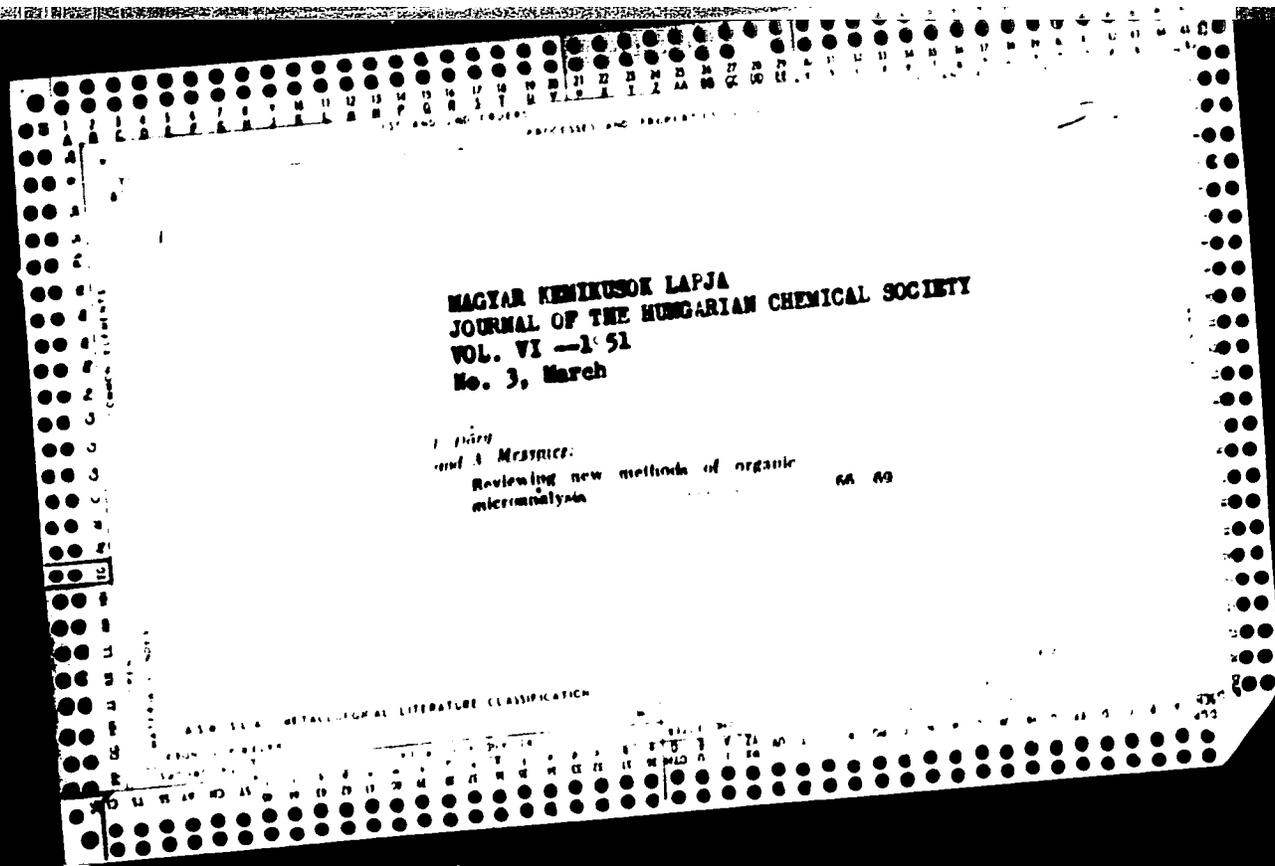
ACC NR: AP6034520

and the most active enzyme was found in *Cl. septicum*.  
The desoxyribonuclease of *Cl. perfringens* was weaker, and  
its activity varied according to culture strain and condi-  
tions. The *Clostridia* enzymes studied differed chemically,  
physiologically, and in their action upon the substrate.  
A purified preparation of *Cl. septicum* desoxyribonuclease  
was obtained by chromatography on an ion-exchange column.  
The enzyme may thus be described more fully and its role  
in the pathogenesis of gas gangrene may be determined. Orig.  
art. has: 1 figure and 1 formula. [EL]

[WA-50; CBE No. 14]

SUB CODE: 06/ SUBM DATE: 04Nov65 / ORIG REF: 003/ OTH REF: 013

Card 2/2



MAGYAR KÉMİKUSOK LAPJA  
JOURNAL OF THE HUNGARIAN CHEMICAL SOCIETY  
VOL. VI —1951  
No. 3, March

and Messinger:  
Reviewing new methods of organic  
microanalysis 6A 69

ASAC 313A DETACHMENT LITERATURE CLASSIFICATION

MESSMER, ANDRAS

Chemical Abst.  
Vol. 48 No. 4  
Feb. 25, 1954  
Organic Chemistry

Structure of formazans of the sugar group. Géza Zemplén, László Mester, András Mezős, and Ede Bekhart (Tech. Univ., Budapest). *Acta Chim. Acad. Sci. Hung. 2. 25-32 (1953)* (in German).—The reaction of sugar phenylhydrazones with a neutralized soln. of diazotized PhNH<sub>2</sub> (I) was investigated to det. the actual mode of formation of sugar formazans. The linkage of I can not take place at the HO group of the sugar mol., nor at the imide group of the phenylhydrazone. The latter possibility exists theoretically but the intermediate product rearranges to formazan. The *p*-position of the phenylhydrazone offers no chances for the linkage under these conditions, thus only the azomethine C atom of the sugar phenylhydrazone remains as a possible location for the linkage. Galactose in 90% EtOH and pyridine, with crystd. NaOAc and I gave no ppt. when diltd. with water. Similar treatment of galactose methylphenylhydrazone and arabinose diphenylhydrazone yielded the unchanged initial compl., since there is a substituted imino H and according to the Busch theory (B. and Pfeiffer, *C.A.* 20, 2992; B. and Schmidt, *C.A.* 23, 3152) phenylhydrazones contg. substituted NH groups give no formazans. Conversely, the treatment of galactose *p*-bromophenylhydrazone with I yielded the corresponding galactose formazan, corroborating that *p*-substitution does not inhibit this reaction: the brownish red galactose *p*-bromoformazan, m. 161-2°, was obtained in 2.8 g. yield by treating 2.3 g. galactose *p*-bromophenylhydrazone and 2.3 g. crystd. NaOAc in 8 ml. EtOH and 13 ml. pyridine at -5° with a soln. of 0.7 I at -5°, allowing to stand 24 hrs., filtering, drying in a vacuum desiccator, and recrystg. from hot EtOH. As a decisive confirmation of the formazan structure, the same compd., m. 161.5-2.0°, was prepd. also by adding 0.85 g. isopentyl nitrate drop by drop to 3.4 g. H<sub>2</sub>Cat.NH<sub>2</sub> in a 14 ml. soln. (over)

MESSNER, ANDREAS

Preparation of thioaldonic acid phenylhydrazide by the action of hydrogen sulfide upon sugar-fornazyls. *Chem. Zentrbl.*, 1936, 697-9 (1936) (in German). ~~See throughout this abstr.~~  
 R = *D*-galacto-pentahydroxypentyl. The reduction of sugar-fornazyl with H<sub>2</sub>S yields the phenylhydrazide of thioaldonic acids. The constitution of these derivs. is proved by the precip. of new thiazolone derivs. of the sugar series. Thus a soln. of 1 g. RC(:NNHPh)N:NPh in 100 ml. 90% EtOH satd. with H<sub>2</sub>S, kept 48 hrs. at room temp., filtered from the S and coned. *in vacuo* gave 0.57 g. RC(:S)NHNH-Ph (I), m. 174°, [α]<sub>D</sub><sup>20</sup> 31.5° (C<sub>12</sub>H<sub>17</sub>N). I (1 g.) in 50 ml. H<sub>2</sub>O and heated 1 hr. until no more H<sub>2</sub>S was evolved, and the liq. soln. decolorized with C and coned. *in vacuo* gave 0.3 g. RCONHNHPh, m. 202°, [α]<sub>D</sub><sup>20</sup> 9.58° (H<sub>2</sub>O). I (0.3 g.) and 0.24 g. BaCl in 0.6 ml. sat. EtOH treated with 0.25% HCl and the mixt. warmed on a H<sub>2</sub>O bath 1 min. yielded 0.5 g.

RC(:N.NPh)CHPh.S m. 163-4°, [α]<sub>D</sub><sup>20</sup> 226.1° (90% EtOH). RC(:NNHPh)N:NPh (R' = *D*-gluco-pentahydroxypentyl) (1.5 g.) gave 1.1 g. RC(:S)NHNHPh, m. 178-9°, [α]<sub>D</sub><sup>20</sup> 69.4° (C<sub>12</sub>H<sub>17</sub>N).  
 J. S. Martiu, Jr.



Country : HUNGARY  
G  
Institution : Organic Chemistry. Synthetic Organic Chemistry  
No. : Ref Zhur - Kaim., no 5, 1959, No. 323  
Author : Messmer, A.; Varady, J.; Pinter, I.  
Institution : Hungarian AS  
Title : Halogenation and Cyclizing Dehydrogenation  
with Tribromophenol-Bromine  
Orig. Pub. : Magyar tud. akad. Kem. tud. oszt. kozl., 1957,  
9, No 3, 329-334  
Abstract : In search of new halogenation agents, the au-  
thors dwelled on tribromophenol-bromine (I)  
which, possessing a quinoid structure that  
changes during the output of Br into a benzoid  
one, can be preferred to N-bromosuccinimide  
(II) in those cases where the reaction is elec-  
trophilic. For comparison, bromination of cyc-  
lohexene (III) was conducted to an allyl state  
(at 83°), and that of acetanilide (IV) to an  
aromatic nucleus (CCl<sub>4</sub>, at 77°). During halo-

Car : 1/3

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Country :  
Category :

Abs. Jour : Ref Zhur - Khim., No 5, 1959, No. 15323

Author :  
Institut. :  
Title :

Orig. Pub. :

Abstract : generation of III by the action of II (20 min-  
cont'd. : utes), 1-bromocyclohexene-2 (V) was obtained  
with 87% yield, while I gives V with a yield  
of 42%. During halogenation of IV, similar  
yields are obtained in the case of II within  
160 minutes, and in the case of I within 35  
minutes. For comparison of I with II during  
cyclizing dehydrogenation (CD) from  $\alpha$ -benzene-  
azo-N-phenyl- $\beta$ -naphthylamine, 1,2-diphenyl-  
naphthotriazole (VI) is obtained, and from

Card: 2/3

MESSMER, A.

Halogenation and cyclizing dehydrogenation with tri-  
bromophenol-bromine / A. Messmer, J. Varady, and T.  
 Pinter (Zentralforschungsanst. Chem. Ungarns. Akad.  
 Wiss., Budapest). *Acta Chim. Acad. Sci. Hung.* 15,  
 183-4 (1968) (in German).—The use of tribromophenol-  
 bromine (I) was examined. *N*-Bromosuccinimide (II) proved  
 to be preferable to I in allylic halogenations while I  
 was the more suitable reagent in cyclizing dehydrogenation  
 and aromatic halogenations. II was prepd. according to  
 Ziegler, et al. (C.A. 57, 5033<sup>4</sup>), and *N*-chlorosuccinimide  
 according to Tschermiac (Ber. 94, 4212 (1902)). To 83 g. I  
 was added 364 g. cyclohexene (IV), the mixt. brought to  
 gentle boiling, boiled 2.5 hrs. (no more active Br present),  
 distd. 1st at atm. pressure and then at 50-60 mm. (224 g.  
 IV recovered), and the slowly crystg. residue filtered to give  
 a cryst. residue (V) and a dark liquid (VI). VI on fractiona-  
 tion gave (1) 13.6 g. 3-bromo-1-cyclohexene, b<sub>p</sub> 43-50°,  
 n<sub>D</sub><sup>20</sup> 1.5210, (2) 1.3 g. 3-bromocyclohexanone, b<sub>p</sub> 55-60°,  
 n<sub>D</sub><sup>20</sup> 1.5061, (3) 3.4 g. 1,2-dibromocyclohexane, b<sub>p</sub> 76-80°,  
 n<sub>D</sub><sup>20</sup> 1.5504, and (4) residue, subliming above 80°/4 mm. and  
 giving a dark cryst. compl., m. 85°, identical with V, and  
 giving no depression with I (m. 98°). Anthracene (VII)  
 (5.93 g.) and 13.6 g. I in 50 ml. CCl<sub>4</sub> boiled 15 min. (no  
 more active Br present), the soln. extrd. with three 20-ml.  
 portions of 10% aq. NaOH, washed with H<sub>2</sub>O, dried, CCl<sub>4</sub>  
 distd., and the residue fractionated gave 4.6 g. product,  
 which recrystd. from 75 ml. boiling EtOH yielded 3.6 g.  
 9-bromoanthracene (VIII), m. 103°. VII (9.0 g.) and 9.0 g.  
 II in 50 ml. CCl<sub>4</sub> boiled 70 min. (no more active Br present),  
 the ppt. filtered off, CCl<sub>4</sub> distd. from the filtrate, and the  
 residue distd. gave VIII, b<sub>p</sub> 212-15°, recrystd. from 220 ml.  
 boiling EtOH to yield 8.2 g. VIII, m. 108°. PhNHAc (4.5  
 g.) and 13.6 g. I in 30 ml. CCl<sub>4</sub> treated as above gave 4.7 g.  
 4-BrC<sub>6</sub>H<sub>4</sub>NHAc (IX), m. 168°. PhNHAc (4.0 g.) and 4.7

g. II in 30 ml. CCl<sub>4</sub> treated as above gave 4.8 g. IX, m.  
 168°. For cyclizing dehydrogenation reactions 1-phenyl-  
 iso-*N*-phenyl-2-naphthylamine (X) and triphenylormazan  
 (XI) were selected as model compds. PhNH<sub>2</sub> (2.0 g.) in 6  
 ml. concd. HCl and 12 ml. H<sub>2</sub>O diazotized with 1.76 g.  
 NaNO<sub>2</sub> in 6 ml. H<sub>2</sub>O under ice-cooling, the diazo soln.  
 added with stirring to a warm soln. of 4.5 g. *N*-phenyl-2-  
 naphthylamine in 100 ml. EtOH, the soln. cooled, the ppt.  
 filtered off, and recrystd. from BuOH gave 3.9 g. X, m.  
 142°. PhCH:NNHPh (10 g.) dissolved in 50 ml. pyridine,  
 treated with PhN<sub>2</sub>Cl soln. (from 5 g. PhNH<sub>2</sub>), and the ppt.  
 (11 g.) recrystd. thrice from BuOH gave XI, m. 172°.  
 Solns. of 0.42 g. I and 0.18 g. II in 20 ml. EtOAc were  
 separately prepd., treated with 20 ml. soln. of 0.32 g. X in  
 50 ml. EtOAc (mole ratio 1:2.5 X-I and II), and the temp.  
 required for decolorization noted: (a) with I decolorization  
 began within 1 min. and the original color disappeared  
 within 1.5 min.; a yellow cryst. compd. sepd. slowly which  
 was characterized as 1,2-diphenylaphthotriazolium bro-  
 mide (XII) by its reconversion to X by ascorbic acid (XIII) in  
 alk. media; (b) with II decolorization began after 2 hrs.  
 and was complete in 2.5 hrs.; XII crystd. out slowly. XI  
 (1 mole) treated similarly in EtOAc at 20° with 1.2 moles  
 III required 24 hrs. for decolorization and gave the tetrazol-  
 ium bromide (XIV). XI (1 mole) treated with 1.2 moles II  
 required 60 min. for decolorization, XIV being formed. XI  
 (1 mole) and 1.2 moles I required 2 min. for decolorization,  
 XIV being formed; for decolorization within 2 min. 1 mole  
 XI required 12 moles II. The character of XIV as a tetrazol-  
 ium salt was confirmed by its reconversion into XI by XIII in  
 alk. media.

4E3d 2 May

4E7c  
6

William Braker

XGW

18. The structure of pseudoaromatic chelates. <sup>7</sup> A. Messner, O. Sziman. <sup>3</sup> 277AY  
Magyar Kemiai Folyoirat, Vol 64, 1958, No. 7-8, pp 290-292, 8 figs. 1 tab.

Studies of the reaction mechanism of the splitting of the hydrogen-bridge led to the conclusion that there is a  $\sigma$  resonance in the N-H... N bridges of pseudoaromatic chelates (six-membered chelate systems with two double bonds). This statement is in agreement with the u. v. spectroscopical properties of model compounds substituted on various sides of the bridge, but it is different from chelates studied by Burawoy which were supposed to contain O-H... N bridges of pure electrostatic structure. Thus pseudoaromatic chelates containing O-H... N and N-H... N bridges are fundamentally different in respect to the structure of the hydrogen bridge.

(Retyped clipped abstract)

jt

Card 1/1

MULLER, Sandor, dr., prof.; (Budapest, VIII., ~~Museum~~ korut 4/b)  
MESSMER, Andras, dr. (Budapest, II., Pusztaszeri ut 57/60)

Contribution to the symbols of organic chemical structural forms. Acta chimica Hung 38 no.1:35-45 '63.

1. Institut fur Organische Chemie der L. Eotvos-Universitat,  
Budapest, und Zentralforschungsinstitut fur Chemie der  
Ungarischen Akademie der Wissenschaften, Budapest.

10884-00 EXP(1) RM  
ACC NR: A 6034717

SOURCE CODE: HU/0005/65/071/009/0388/0392

AUTHOR: Biczo, Geza, Ladik, Janos, Messmer, Andras; Hungarian Academy of Sciences, Central Research Institute of Chemistry (Magyar Tudomanyos Akademia, Kozponti Kemiai Kutato Intezet), Budapest.

TITLE: Study of the electronic structure of 1-benzene-azo-n-phenyl-2-naphthyl-amine chelate II. Approximate calculation of the potential function of the n-h...n hydrogen bond

SOURCE: Magyar kemiai folyoirat, v. 71, no. 9, 1965, 388-392

TOPIC TAGS: hydrogen bonding, organic azo compound, chelate compound

ABSTRACT: The potential functions of the N-H...N hydrogen bond of 1-benzene-azo-N-phenyl-2-naphthylamine and of the O-H...N hydrogen bond of 1-benzene-azo-2-naphthol have been calculated by using the semiempirical method of Hippincott and Schroeder. The calculations were carried out for different N-N and O-N distances. According to the results, in the chelate system containing the N-H...N hydrogen bond, the potential function has only one single minimum if the N-N distance is smaller than 2.76 Å. Since such a large N-N distance seems to be improbable, this result is in agreement with the previous experimental results which indicate that this system is homogeneous. The results obtained for the second system indicate that a potential with double minima can be expected only if the O-H distance is greater than 2.78 Å.

Card 1/2

0921 1346

L 46854-06  
ACC NR: AP6034717

The authors thank Jeszanak Adrienne for carrying out the calculations. Orig.  
art. has: 4 figures, 10 formulas and 2 tables. [JPRS] [Based on authors' Eng. abst.]

SUB CODE: 07 / SUBM DATE: 21 Jan 65 / ORIG REF: 002 / OTH REF: 005

Card 2/2

MESSMER, Andras

On the mechanism of diazotation and azo-coupling. Magyar kem lap  
18 no.8:384-394 Ag '63.

1. Magyar Tudomanyos Akademia Kozponti Kemiai Kutato Intezete.

L 34716-66 EWP(J) RM

SOURCE CODE: HU/2502/65/046/003/0195/0203

ACC NR: AT6025195

AUTHOR: Biczo, Geza—Bitso, G. (Doctor); Ladik, Janos—Ladik, Y. (Doctor); Messner, Andras (Doctor)

ORG: Central Research Institute for Chemistry, Hungarian Academy of Sciences, Budapest

TITLE: Investigation of the electronic structure of 1-benzene-azo-11-phenyl-2-naphthylamine chelate. Part 2

SOURCE: Academia scientiarum hungaricae. Acta chemica, v. 46, no. 3, 1965, 195-203

TOPIC TAGS: chelate compound, organic azo compound, chemical bonding

ABSTRACT: Part 1 was published Ibid., v. 38, 1963, p. 393. The potential function of the N-H...N hydrogen bond in the title compound and of the O-H...N hydrogen bond in 1-benzene-azo-2-naphthol was determined for various N-H and N-O distances. The chelate system was found to be homogeneous. The values obtained were presented and discussed. The authors thank Miss A. Jeggnek for performing the numerical calculations. Orig. art. has: 4 figures, 10 formulas, and 2 tables. (Orig. art. in Eng)

(JPRS: 34,165)

SUB CODE: 07 / SUM DATE: 04Feb65 / ORIG REF: 002 / OTH REF: 005

Card 1/1

0916 0560

MFSTAK, Bohuslav, dr.

For profitable management of enterprises. Pp. 1-2.  
63-66 F '65.

1. Technical and Economic Research Institute of Metallurgical  
Industry and Ore Mines.

MESTAN, J.

PHASE I BOOK EXPLOITATION

Z/6284

Jerle, Jan, ed., Engineer, Doctor, Corresponding Member of the Czechoslovak Academy of Sciences

Základní problémy ve stavbě spalovacích turbin (Basic Problems in the Construction of Gas Turbines [collection of articles]). Prague, Nakl. ČAV, 1962. 627 p. 1600 copies printed.

Sponsoring Agency: Československá akademie věd.

Ed. of Publishing House: Marie Moravcová; Tech. Ed.: František Končický.

**PURPOSE:** The book is intended to familiarize turbine designers with recent developments in the design of gas turbines and to present some research results which may be helpful in designing more efficient turbines.

**COVERAGE:** The book comprises articles by leading Czechoslovak turbine experts on thermodynamic cycles, flow research in turbine components,

burning of fuel in combustion chambers, axial compressors, and characteristics of turbines manufactured in Czechoslovakia.

9/13

Basic Problems in the Construction (Cont.)

z/6284

V. Svoboda, J. Šinták, J. Feirfell, and J. Měšťan (Prague Electrical Engineering Plant, Prague). Axial Compressors Manufactured by the Českomoravska Kolben Daněk Electrical Equipment Plant

○ 457

V. Folta and M. Vlasák (State Research Institute for Heat Engineering, Prague). Theoretical and Experimental Results of Studies on the Properties of Axial Compressors

485

M. Vlasák. Axial Compressors for High Pressure Ratios

499

R. Dvořák (Institute for Machine Research, Czechoslovak Academy of Sciences, Prague) and K. Čelíkovský (Aviation Research and Testing Institute, Lethany). Flow in the Transonic and Supersonic Stage of an Axial Compressor

513

O. Buňata ("Jan Šverma" Plant, Jinonice). Inlet Air in a Radial Compressor at Transonic Flow Velocities

529

Card ~~7/8~~ 2/2-



Country : CUBA  
Abs. Jour. :  
Author :  
Editor :  
Title :  
Orig. No. :  
Abstract :  
(cont) ...

REINIS, Z.; POKORNY, J.; HRABANE, J.; MESTAN, J.

Relation of serum lipoproteins to organic complications in atherosclerosis. Sborn. lek. ol no.11-12:331-338 Nov 59.

1. IV. interni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. dr. M. Fucik.  
(ARTHERIOSCLEROSIS, blood) (LIPOPROTEINS, blood)

ZOULEK, D.; SOUKUPOVA, K.; MESTAN, J.; HRABANE, J.; REINIS, Z.

Epidemiological studies on health conditions in rural population of a mountain village with regard to atherosclerosis. Sborn. lek. 61 no. 11-12:339-344 Nov 59.

1. Iv. interni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. dr. M. Fucik.  
(ARTHERIOSCLEROSIS, statist.) (RURAL HEALTH)

REINIS, Z.; ZOULEK, D.; MESTAN, J.; SOUKUPOVA, K.; KRABANE, J. KONRAD, J.

Epidemiology of atherosclerosis. Cas.lek.cesk. 99 no.7/8:231-241  
19 F '60.

1. Kardiovaskularni laborator IV. interni kliniky KU v Praze, pred-  
nosta prof.dr. M. Fusik. Interni oddeleni UNZ v Turnove, prednosta  
MUDr. J. Konrad.

(ARTERIOSCLEROSIS epidemiol.)

POKORNY, J.; REINIS, Zd.; MESTAN, J.; PARTLOVA, O.

Ischemic disease of the heart in patients with thromboangitis  
obliterans. Acta univ. carol. [med.] Suppl. 14:463-468 '61.

1. IV. interni klinika fakulty vseobecneho lekarstvi University  
Karlovy v Praze, prednosta prof. dr. M. Fucik.  
(THROMBOANGIITIS OBLITERANS compl) (CORONARY DISEASE etiol)

ZOULEK, D.; REINIS, Z.; KONRAD, J.; MESTAN, J.; HRABANE, J.

Role of ischemic disease of the heart in the epidemiology of atherosclerosis. Acta univ. carol. [med.] Suppl. 14:469-476 '61.

1. IV. interni klinika fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. dr. M. Fucik Fakultni nemocnice v Praze — Vinohrady Interni oddeleni nemocnice v Turnove Ustredni laboratore fakultni nemocnice v Praze 2. prednosta dr. J. Hrabane.  
(CORONARY DISEASE epidemiol)

SULC, M.; MESTAN, J.; MICHALEC, C.

Lipids in certain pathological conditions. I. The iodine number in clinical atherosclerosis. Sborn.lek.63 no.2:33-39 P '61.

1. Laborator angiologicka fakulty vseobecneho lekarstvi University Karlovy v Praze, reditel prof.dr. B.Prusik; Laborator pro metabolismus bilkovin a proteosyntezu fakulty vseobecneho lekarstvi University Karlovy v Praze, reditel prof. dr. J.Horejsi.

(ARTERIOSCLEROSIS blood)

(FATS blood)

(IODINE)

MICHALEC, U.; SULC, M.; MESTAN, J.; HALAMA, D.; KOMAN, V.

Lipids in certain pathological conditions. II. Studies on fractions on cholesterol esters in human and animal blood. Sborn. lek. 63 no.4:99-103 1961.

1. Laborator pro metabolismus bikovin a proteosyntezu fakulty vseobecneho lekarstvi University Karlovy v Praze, reditel prof. dr. J.Horejsi, Laborator angiologicka fakulty vseobecneho lekarstvi University Karlovy v Praze, reditel prof. dr. B.Prusik, Slovenska vysoka skola technicka, katedra biochemie a mikrobiologie v Bratislave, reditel prof. dr J.Nemec.

(CHOLESTEROL blood)

PRUSIK, B.; REINIS, Z.; MESTAN, J.

Progressive development of thromboangiitis obliterans. (A report on 450 patients with Buerger's disease). Cas.lek.cesk 100 no.4:97-101 27 Ja '61.

1. Kardiovaskularni laborator Fakulty vseobecneho lekarstvi v Praze, prednosta prof. dr. B. Prusik, IV. interni klinika, prednosta prof. dr. M. Fucik, Praha.

(THROMBOANGIITIS OBLITERANS statist)

SULC, Miroslav; MICHALEC, Cestmir; MESTAN, Jan; KOLMAN, Zdenek

Experience with the isolation of unsaturated glycerides and their characteristics in the human serum. Cas.lek.cesk 100 no.22:696-698  
2 Je '61.

1. Angiologicka laborator fakulty vseobecneho lekarstvi KU v Praze,  
reditel prof. dr. B. Prusik. Laborator pro metabolismus bilkovin a  
proteosyntezu fakulty vseobecneho lekarstvi KU v Praze, reditel  
prof. dr. J. Horejsi.

(FATS, UNSATURATED blood)

MICHALEC, C.; SULC, M.; MESTAN, J.; KOLMAN, Z.; JICHOVA, M.

Comparative chromatographic studies on the content of unsaturated triglycerides in various oils and fats. Cas.lek.cesk 100 no.29/30: 909-912 14 J1 '61.

1. Laborator pro proteosyntezu a metabolismus bilkovin fakulty vseobecneho lekarstvi KU v Praze, reditel prof. dr. J. Horejsi, Laborator angiologicka fakulty vseobecneho lekarstvi KU v Praze, reditel prof. dr. B. Prusik.

(LIPIDS chem)

MESTAN, J

PHASE I BOOK EXPLOITATION

JUN 25 8/3284

42

Jerie, Jan, ed., Engineer, Doctor, Corresponding Member of the Czechoslovak Academy of Sciences

Základní problémy ve stavbě spalovacích turbin (Basic Problems in the Construction of Gas Turbines [collection of articles]). Prague, Nakl. ČAV, 1962. 627 p. 1600 copies printed.

Sponsoring Agency: Československá akademie věd.

Ed. of Publishing House: Marie Moravcová; Tech. Ed.: František Končícký.

PURPOSE: The book is intended to familiarize turbine designers with recent developments in the design of gas turbines and to present some research results which may be helpful in designing more efficient turbines.

COVERAGE: The book comprises articles by leading Czechoslovak turbine experts on thermodynamic cycles, flow research in turbine components,

Card 1/8

Basic Problems in the Construction (Cont.)

V. Svoboda, J. Šinták, J. Feirfell, and J. Měštan (Prague Electrical Engineering Plant, Prague). Axial Compressors Manufactured by the Českomoravska Kolben Daněk Electrical Equipment Plant

2/6284

V. Polta and M. Vlasák (State Research Institute for Heat Engineering, Prague). Theoretical and Experimental Results of Studies on the Properties of Axial Compressors

457

M. Vlasák. Axial Compressors for High Pressure Ratios

485

R. Dvořák (Institute for Machine Research, Czechoslovak Academy of Sciences, Prague) and K. Čelíkovský (Aviation Research and Testing Institute, Lethany). Flow in the Transonic and Supersonic Stage of an Axial Compressor

499

O. Buňata ("Jan Šverma" Plant, Jínonice). Inlet Air in a Radial Compressor at Transonic Flow Velocities

513

Card 7/8

529

EXCERPTA MEDICA Sec. 17 Vol. 3/6 Public 14th June 57

1922. MĚŠTAN J. F., KRÁL V. and HORNÍ J. Intern. Odd. KÚNZ, Karlovy Vary.  
\*Metereologické vlivy a infarkt myokardu. Meteorological influences and infarct of the myocardium ČAS. LÉK. ČES. 1956, 95/22 (581-585) Graphs 3

The relation of meteorological influences to recent myocardial infarction is studied by the authors in 126 patients hospitalized during 1949-1954 at the Regional Hospital of Karlovy Vary. The majority of cases, 61 (47.7%), is found during the cold front, 41 (31.7%) during the occlusion and 24 (19.6%) during the warm front. The majority of cases is observed at the day of the passage of the front, in the following days the number of cases falls. The meteorological factors are considered on the basis of these observations and others as a supplementary factor in the aetiopathology of the myocardial infarction. Prophylactic measures are proposed during the meteorological changes, as the regulation of diet, application of sedatives or even of anticoagulants mainly in patients who are threatened by a relapse of a myocardial infarction.

(VI, 17)

REINIS, Z.; POKORNY, J.; MESTAN, J.F.

Clinical development of Burger's disease. Cas. lek. cesk. 90  
no.23:709-713 9 June 1951. (CJML 20:9)

1. Of the Fourth Internal Clinic (Head--Prof. B. Prusik, M.D.).
2. Report on 15 years of continuous observation of 1195 patients (statistics).

MESTAN, J. F.

**CZECH**

~~Lestrade's reagent for the determination of acetone and  
acetoacetic acid. J. F. Mestan and L. Cilka (internal  
document Kuntz, Karlovy Vary, Czech.). Casopis Lékarská  
Časopis 93, 1231-3(1964); cf. C.A. 45, 9104b. Lestrade's  
reaction for ketonuria was found much more sensitive than  
the usual Legal or Lang test. Some preliminary information  
about the presence of ketone bodies in blood can also be  
obtained. Iva M. Hais.~~

DC

MESTAN, K.

MESTAN, K.; MIKSA, J. "Eruption of Permanent Teeth." p. 137.  
(Casopis Lekaru Ceskych. Vol. 93, no. 6, Feb. 1954. Praha).

SO: Monthly List of ~~Books~~ Accessions, East European Vol. 3, No. 6, Library of Congress, June 195<sup>4</sup>, Uncl.

**MESTAN**, Radomir, inz.

~~Activity of a designing office.~~ Poz stavby ll no.7:349-352 '63.

1. Fasadostav Praha.

(

CZECH/3-59-11-19/36

AUTHOR: Měšťan, Rudolf  
TITLE: Gliding Aids and Results (Plachtařské pomůcky a výkony)  
PERIODICAL: Křídla Vlasti, 1959, Nr 11, lower part of p 16 (CSR)  
ABSTRACT: Author describes some of the gliding aids he used during the 7th Glider Championship held in Poland in 1958. There is 1 photo.

Card 1/1

6 (6)

AUTHORS:

Ostrovskiy, I. V. and Mestechkin, B. I. <sup>111-51-127125</sup> engineers

TITLE:

The Matching of the Equipment of Radio Relay Lines and Television Stations (Soglasovaniye oborudovaniya radio-releynykh liniy i televizionnykh stantsiy)

PERIODICAL:

Vestnik svyazi, 1959, Nr 4, pp 4 - 7 USSR

ABSTRACT:

In the near future, new radio relay lines of types R 60 and "Vesna" will connect TV stations and relay transmitters, providing a possibility to exchange TV programs between stations. Since the equipment used at the different TV stations is very different a careful matching of the relay equipment is required. The TV transmitters presently in operation are designed to produce a video signal of positive polarity at 5 volts amplitude, while the signal at the outlet of the "Vesna" equipment has only a 1 volt amplitude. Therefore, it must be amplified to 5 volts when feeding it to a TV station or relay station. There are 4 block diagrams and 1 table.

Card 1/1

5.310  
AUTHOR:

Mestechkin, M. M.

68915  
S/054/60/000/01/002/022  
B013/B007

TITLE:

Some Applications of the Density Matrix in the Method of Molecular Orbits

PERIODICAL:

Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1960, Nr 1, pp 12-21 (USSR)

ABSTRACT:

The author determines the totality of such relations as suffice for the direct determination of the order of bonds and the total electron energy in the approximation of self-consistent molecular orbits. The results found in this manner are then applied to the alternant hydrocarbons. In the first part of the paper the equations for the matrix of the order of bonds are determined. In this the author proceeds from the Fok equation for the ground state of a molecule with an even number ( $N = 2n$ ) of electrons. The molecular orbits are expanded with respect to the atomic orbitals.

$\varphi_1(\vec{r}) = \sum_{p=1}^m c_{1p} \chi_p(\vec{r})$ . For the density matrix  $\rho(\vec{r}, \vec{r}')$  -

$\rho(\vec{r}, \vec{r}') = \sum_{p,q=1}^m \bar{\chi}_p(\vec{r}) \chi_q(\vec{r}') \sum_{i=1}^n \bar{c}_{ip} c_{iq}$  is then obtained. After introducing

Card 1/3

Some Applications of the Density Matrix in the  
Method of Molecular Orbitals

68915  
S/054/60/000/01/002/022  
B013/B007

the column matrix,  $q(\vec{r}, \vec{r}') = \chi^\dagger(\vec{r}) P \chi(\vec{r}')$  may also be written down. Also an orthogonality equation for the coefficients of the expansion is written down. Molecule energy may be expressed by the three matrices  $F'$ ,  $P'$ , and  $H'$ . In the second part of the paper the formulas found in the first part are then discussed.  $F = S^{-1/2} P' S^{-1/2}$ ,  $P = S^{1/2} P' S^{1/2}$  holds.  $P$  is the projection matrix, its eigenvalues are equal to zero or unity.  $P = Q [11 \dots 10 \dots 00 \dots]$  holds, where  $P$  is brought to the diagonal form by the unitary matrix  $Q$ . A way of determining  $Q$  is shown. In the third part of the paper the integral forms for the orders of magnitude of the bonds are then determined. In particular,  $P$  is expressed by  $F$ . In the fourth part of the paper the results obtained are then applied to the alternant hydrocarbons. For this purpose only  $\pi$ -electrons are investigated. The charges on the atoms are equal to unity, and the magnitude of the bonds between atoms of the same kind are equal to zero. Neglecting overlapping, an integral formula, similar to the Coulson formula is obtained for energy, which is also explicitly written down. Following this, the main part of mutual  $\pi$ -electron interaction is taken into account. According to concrete calculations of alternant molecules, the

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Some Applications of the Density Matrix in the  
Method of Molecular Orbits

68915

S/054/60/000/01/002/022  
B013/B007

bond orders differ by not more than 25 to 30%. In the alternant molecules a simple calculation by means of the simple theory by LKAO (which is not defined here) is equivalent to consideration of the main part of  $\pi$ -electron interaction among one another. This is apparently also the reason why such calculations yield better results for alternant than for non-alternant molecules. The author thanks M. G. Veselov for reading the manuscript and for his advice. There are 8 references, 2 of which are Soviet.

4

Card 3/3

86335

S/054/60/000/004/009/015

B004/B056

J. 3100 (1228, 1241, 1306)

AUTHOR: Mestechkin, M. M.

TITLE: Calculation of Bond Orders in Conjugate Molecules

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1960, No. 4, pp. 89-97

TEXT: The matrix of bond orders, which determines the charge distribution of  $\pi$ -electrons in a molecule has been studied. In an earlier paper (Ref.6), the density matrix P was expressed by the energy matrix F:  $P=f(F)$  (4). X

The following relations were derived:

$$P = 0.5 \left[ I - (2k/\pi) F_a^{2k-1} \sin(\pi/2k) \int_0^{\infty} (F_a^{2k} + t^{2k} I) dt \right] \quad (9); \quad F_a = F - aI; \text{ and}$$

$$P = 0.5 \left[ I - (2/\pi) \left[ (2k-2)!! / (2k-3)!! \right] F_a^{2k-1} \int_0^{\infty} (F_a^2 + t^2 I)^{-k} dt \right] \quad (10). \text{ In}$$

the case of a sufficiently large k, these integrals rapidly converge. Further, a generalization of the theory set up by K. Ruedenberg (Ref. 11) on

Card 1/2

Calculation of Bond Orders in Conjugate Molecules <sup>86335</sup> S/054/60/000/004/009/015  
B004/B056

bond orders in hydrocarbons is given:  $P = 0.5 [I + M(M^2)^{-1/2}]$  (15) (M = topological matrix of the molecule). To avoid several determinations of the reciprocal matrix, an algorithm for the calculation of  $A^{-1/2}$  is given, which simplifies computation by means of computers. For fulvene,  $(M^2)^{-1/2}$  was calculated in five iterations. The bond orders obtained agree with the data of C. A. Coulson (Ref. 14). M. G. Veselov and M. N. Adamov are thanked for a discussion. There are 2 figures and 17 references: 3 Soviet, 3 US, 8 British, and 2 French. X

Card 2/2

863:6

J.3100 (122B, 124A, 1306)

S/054/60/000/004/010/015  
B004/B056AUTHOR: ~~Mestechkin, M. M.~~

TITLE: Some Indices of the Reactivity of Molecules With Conjugate Bonds

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1960, No. 4, pp. 98-103 X

TEXT: It was the purpose of the present work to derive straightforward equations for the reactivity of the molecules of hydrocarbons with conjugate double bonds. Proceeding from a paper by M.S.R. Dewar (Ref. 2), the localization energy is suggested to be used as an index of reactivity (IRC):

$$l_r = \begin{cases} \left[ (BB')_{rr}^{-1} \right]^{-1/2} & \text{for the atoms of the first assembly} \\ \left[ (B'B)_{rr}^{-1} \right]^{-1/2} & \text{for the atoms of the second assembly} \end{cases}$$

[Abstracter's note: No definition is given]. Proceeding from a paper by

Card 1/2

86336

Some Indices of the Reactivity of Molecules With S/054/60/000/004/010/015  
Conjugate Bonds B004/B056

K. Fukui (Ref. 6), the following relation is derived for the superdelocalizability:

$$S_r = \begin{cases} (BB')_{rr}^{-1/2} \\ (B'B)_{rr}^{-1/2} \end{cases}$$

or, if the bond orders have already been calculated:  $S_r = (PM^{-1} - gM^{-1})_{rr}$  (P = density matrix; M = topographical matrix of the molecule).  $S_r$  may also be used as IRC. The author discusses the limiting electron density  $f_r$  suggested by Fukui to be used as IRC. Basing upon the example of fulvene it is shown that the calculation of IRC from  $l_r$  and  $S_r$  leads to the same results, whereas the data calculated from  $f_r$  deviate considerably therefrom. The author thanks M. G. Veselov for supervising the present work and M. N. Adamov and I. F. Tupitsyn for discussions. There are 1 table and 10 references: 1 Soviet, 6 US, 2 British, and 2 Japanese. X

Card 2/2

MESTECHKIN, M.M.

Some applications of the density matrix in the molecular orbital  
method. Vest. LGU 15 no.4:12-21 '60. (MIRA 13:2)  
(Chemical bonds)

MESTECHKIN, M.M.

Correlation between the parameters in a standard LCAO method  
determined from data of different sources. Zhur. fiz. khim.  
35 no.2:431-434 F '61. (MIRA 16:7)

1. Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova.  
(Molecular rotation)

MESTECHKIN, M. M.

Cand Phys-Math Sci - (diss) "Use of density matrice for calculations of several properties of molecules." Leningrad, 1961.  
9 pp; (Leningrad Order of Lenin State Univ imeni A. A. Zhdanov);  
180 copies; free; (KL, 10-61 sup, 205)

GEL'MAN, R.Ye.; MESTECHKIN, M.M.; SMIRNOV, A.D., inzh., red.

[Electrical engineering manual in two volumes] Spravochnik elektrotehnika v dvukh tomakh. Moskva, Energiia.  
Vol.2. 1964. 184 p. (MIRA 17:12)

L 29090-66 EWT(1) LJP(c)

ACC NR: AR5019465

SOURCE CODE: UR/0058/65/000/007/D008/D008

AUTHOR: Mestechkin, M.M.

32  
B

TITLE: Energy in the linear combination of atomic orbits (LCAO), taking into consideration the superposition of configurations

SOURCE: Ref. zh. Fizika, Abs. 7D56

REF SOURCE: Uch. zap. Mordovsk. un-t, vyp. 36, 1964, 93-99

TOPIC TAGS: molecular theory, nuclear energy, calculation

ABSTRACT: The problem is examined of calculating corrections to molecular energy on the basis of the molecular orbits method (MO) by means of a partial calculation of the superposition of configurations. Formulas were obtained which contained only the values known from calculations by the MO LCAO method. These formulas permit the calculation of corrections of molecular energy with the help of the population matrix which was obtained by the Rutzan method. The degree of the correction was estimated and it was found that in semi-empirical calculations the given correction would not be essential. In cases of precise variational calculations of small molecules the introduction of such correction is expeditious.

SUB CODE: 20

Card in cc

MESTECHKIN, M.M.

Using independent coefficients in the solution of equations  
for the method of molecular orbitals. Teoret. i eksper.  
khim. 1 no. 5:595-601 S-0 '65 (MIRA 19:1)

Accelerating the procedure of self-consistency in the method  
of molecular orbitals. Ibid.:602-607.

1. Mordovskiy gosudarstvennyy universitet, Saransk. Submitted  
June 14, 1965.

MESTECHKIN, M.M.; SIDORKIN, O.D.

Molecular diagrams of nonalternant hydrocarbons. Zhur.struk.khim.  
6 no.3:436-442 My-Je '65. (MIRA 18:8)

1. Mordovskiy gosudarstvennyy universitet.

IGOLKIN, V.N.; MESTECHKIN, M.M.

A simple method of linear combination of atomic orbitals for some  
nonalternant hydrocarbon molecules. Vest. LGU 20 no.4:5-10 '65.  
(MIRA 18:4)

L 6925-65 EMT(m)/EMP(1)/T Pc-1 ASD(a)-5/SSD/APWL RM 5/  
ACCESSION NR: AR4039910 S/0058/64/000/004/DO12/DO12

SOURCE: Ref. zh. Fiz., Abs. 4D84

AUTHORS: Veselov, M. G.; Mestechkin, M. M.

TITLE: Account of the overlap of atomic functions in calculations of conjugated molecules by the LCAO method

CITED SOURCE: Lit. fiz. sb., v. 3, no. 1-2, 1963, 269-276

TOPIC TAGS: atomic orbital, molecular orbital method, atomic wave function, conjugated system

TRANSLATION: It is shown that the equations of the LCAO molecular orbital method have the same form as in the zero differential overlap approximation, provided the multicenter integrals are taken in the Mulliken approximation. Semi-empirical expressions are obtained for the parameters  $\alpha$  and  $\beta$ .

SUB CODE: NP

ENCL: 00

Card 1/1

ТЕХНИКА

**М. В. Голуб.**  
**А. С. Тарп**

О определении работы параметрических усилителей СВЧ с помощью измерения потерь сигнала в них

**В. О. Солов**

О определении параметров сигнала в параметрических усилителях волнового типа

**9 часов**  
(с 16 до 22 часов)

**А. Д. Бессов**

О методах граничной теории в теории волновых устройств

**Г. А. Зайцев**

О параметрических усилителях сигнала с модуляцией частоты

**М. В. Голуб**

Метод расчета параметров усилительно-лучевых СВЧ устройств волнового типа

**А. В. Лавров.**  
**Ю. И. Волынец**

Об определении коэффициента усиления для нелинейных распределенных и сосредоточенных систем при наличии модуляционного шума

■

**А. В. Голуб**

Взаимодействие параметрических усилителей с антеннами волнового типа

**10 часов**  
(с 10 до 16 часов)

**А. В. Голуб.**  
**В. А. Барыкин**

О возможности улучшения параметров усилителей с помощью параметрических усилителей СВЧ на резонаторах

**М. В. Кузнецов.**  
**А. В. Родыгин**

О свойствах антенны Флаунгейта с параметрическим усилителем

**М. В. Кузнецов.**  
**М. В. Барыкин.**  
**В. Е. Боров**

Интерференционные измерения фазовых сдвигов

**М. В. Бессов.**  
**В. В. Волынец.**  
**В. Е. Боров**

Резонансный тракт для приема радиосигнала с модуляцией частоты

■

report submitted for the Confidential Meeting of the Scientific Technological Society of  
Radio Engineering and Electrical Communications in. A. S. Popov (VSEIEM), Moscow,  
6-18 June, 1959

MESTECHKIN YA I

В. А. Мазур  
Ускоренные электронные лампы с вакуумными  
модульными элементами

10 страниц  
(с 16 до 22 часов)

Д. И. Виноградов,  
Р. А. Гринберг  
Замедленные лампы с ионно-электронным  
для ЛИС

С. Г. Константинов  
Оптимизация системы с будущей лампой

В. И. Соболев,  
В. И. Галахов,  
В. И. Калинин,  
В. И. Митченко

Исследования структуры лампы в пространстве  
электронного потока СВЧ с помощью антенны  
для измерения траекторий отдельных частиц

Г. А. Мухомов,  
С. И. Баранов

Замедленные лампы типа фазового для оценки  
с будущей лампой электронного потока

21

11 страниц  
(с 10 до 16 часов)

Синтез лампы с сильной фазовой  
устройств СВЧ

В. И. Зубов, В. С. Мазур  
Исследования лампы с сильной фазовой  
устройств СВЧ

В. И. Тихонов  
Исследования лампы с сильной фазовой  
устройств СВЧ

В. И. Тихонов,  
Ю. Т. Дрозд,  
В. С. Карпов

Исследования лампы с сильной фазовой  
устройств СВЧ

А. Е. Шестов,  
В. С. Шестов

Исследования лампы с сильной фазовой  
устройств СВЧ

А. С. Топ

Исследования лампы с сильной фазовой  
устройств СВЧ

22

report submitted for the Centennial Meeting of the Scientific Technological Society of  
Radio Engineering and Electrical Communications in. A. S. Popov (VSEI), Moscow,  
6-18 June, 1959

Z/037/62/000/005-6/002/049  
E140/E562

AUTHORS: Bleyvas, I.N., Lukoshkov, V.S., Mestechkin, Ya.I.,  
Khomich, V.B., Sherel, L.A. and Shubin, L.V.

TITLE: The solution of problems in electron optics and high-  
frequency electronics by means of mathematical models

PERIODICAL: Ceskoslovensky časopis pro fyziku, no.5-6, 1962,  
439-440

TEXT: A two-dimensional model is described consisting of an  
electrolytic tank and an analog computer for the solution of  
problems with plane or axial symmetry. The system plots  
automatically the electron trajectories on the basis of field  
information obtained from probes in the tank. Among the problems  
which have been treated by the machine are the trajectories of  
electrons in the gap of the central resonator of a three-resonator  
klystron, in a type-M carcinotron, in a plane magnetron and in an  
electron gun taking into account space charge. The precision is  
of the order of 0.5% to 1.5%. There are 10 figures.

ASSOCIATION: Výbor pro elektronovou techniku, Moskva  
Card 1/1 (Committee for Electronic Engineering, Moscow)

L 37677-66 EWT(1) IJP(c) AT/GD

ACC NR: AT6022256

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AUTHOR: Yegorov, G. P.; Mestechkin, Ya. I.; Shubin, L. V.

53

ORG: none

B11

TITLE: Investigation of speed-distribution of electrons in magnetically-formed beams

SOURCE: Vsesoyuznaya nauchnaya sessiya, posvyashchennaya Dnyu radio. 22d, 1966. Sektsiya elektroniki. Doklady. Moscow, 1966, 63-67

TOPIC TAGS: electron beam, SHF, magnetron

ABSTRACT: The results are briefly reported of an experimental investigation of electron-speed spectra (axial components) in an axisymmetrical cylindrical electron beam formed by a longitudinal magnetic field. The electron gun and the magnetic field were so designed that the electron beam had minimum pulsation and was near-laminar. The distribution of current density over the beam diameter, at 5 mm from the electron-optical system, is shown. Findings: (1) The measured spectrum width exceeds that of the Maxwellian distribution; (2) The spectrum width decreases from the edge to the center of the beam; (3) Maximum electron energies differ from the anode potential, which can be explained by the presence of a tangential velocity component and by a rotation of electrons. Orig. art. has: 4 figures. [03]

SUB CODE:09 / SUBM DATE: 09Apr66 / ORIG REF: 005 / OTH REF: 002

ms  
Card 1/1

MESTECHKIN, Yu.; ESTRIN, M., inzh.; AGEYEV, Yu., inzh.

Plastics used in the machinery of grain-processing enterprises. *Mak.-elev. prom.* 26 no. 11:20-22 N '60.

(MIRA 13:11)

1. Starshiy inzhener Glavnaba Gosudarstvennogo komiteta Soveta Ministrov SSSR po khlebosnabzheniyu (for Mestechkin).
2. Spetselevatormel'stroy (for Estrin, Ageyev).  
(Grain--Handling machinery) (Plastics)  
(Grain--Milling machinery)

MESTECHKIN, Yu., inzh.

OS-4,5 grain dryer. Msk.-elev. prom. 27 no.7:17 JI '61. (MIRA 14:7)

1. Upravleniye material'no-tekhnicheskogo snabzheniya Goskomiteta  
zagotovok Soveta Ministrov SSSR.  
(Grain--Drying)

MESTECHKIN, Yu.

VO-50 grain cleaning machine. Muk.-elev. prom. 27 no.9:21  
S '61. (MIRA 15:2)

1. Upravleniye material'no-tekhnicheskogo snabzheniya Goskomiteta  
zagotovok Soveta Ministrov SSSR.  
(Grain—Cleaning)

MESTECKIN, Yu., inzh.

Pneumatic device for cleaning sacks. Mik.-elev. prom. 28  
no.5:3 of cover My '62. (MIRA 15:5)  
(Poland--Flour mills--Equipment and supplies)

MESTECHKINA, A.Ya.

Data on the experimental studies studies of muscular ditrophy. Part 2.  
Creatine and carnosine contents and activity of adenosinetriphosphatase  
and phosphopherase in muscle of rabbits. Ukr.biokhim.zhur. 22 no.2:  
166-175 '50. (MLBA 9:9)

1. Institut biokhimii Akademii nauk URSS, Kiy.  
(DISTROPHY, MUSCULAR) (ENZYMES)  
(CARNOSINE) (CREATINE)

CA

11 f

Effect of adenosine triphosphate on the course of atrophic process in muscle. D. I. Verdman, A. Ya. Mstetskhina, and N. A. Semenov. *Doklady Akad. Nauk SSSR* 73: 257 (1970). Denervation of rabbit leg muscle (sciatic nerve) leads to severe loss of wt. in the limb within 2-4 weeks. If adenosine triphosphate (ATP) is intramuscularly (into back) in the form of Ca salt 4-8 days after the operation, the muscle wt. loss is but 21% instead of 50%. Dosage is unstated. A similar effect is observed with sensitivity of the muscle, which without ATP drops to 40% of normal in 28 days, while with ATP it drops only to 80% of normal. Creatine and easily hydrolyzable P are also maintained at much higher levels in the denervated muscle when ATP is added than in the case without added ATP. The retarding effect of ATP on atrophy is thus shown. (i) M. Kozolupoff

1951

MESTECHKINA, A. Ya.

972

✓ The biochemical changes in the muscle tissue in edematous swelling and in acute brain prolaboration. A. Ya. Mestechkina. *Problemy Netrokhirurgii, Kiev: Gosmeditsal. Seriya 2, 203-14(1956); Referat. Zhur., Khim., Biol. Khim. 1957, No. 4009.*—In brain prolaboration some of the symptoms of edematous swelling are absent, such as the lowered dry tissue residual, increase in the H<sub>2</sub>O content, the lowered cholesterol content, total P, total N, and creatine. On the basis of this M. concluded that brain prolaboration is not accounted for by any edema. H. S. Lazine

Inst. Neurosurgery, Min. Health Ukr SSR.

MESTECKINA, A.Ya.; OKULOVA, L.P.

Biochemical changes in the blood and cerebrospinal fluid in cerebrocranial injury. Vop.neirokhir. 19 no.2:47-51 Mr-Apr '55. (MLRA 8:7)

1. Iz Instituta neyrokhirurgii Ministerstva zdravookhraneniya USSR.  
(BLOOD in various diseases,  
head inj.)  
(CEREBROSPINAL FLUID, in various diseases,  
head inj.)  
(HEAD, wounds and injuries)  
blood & CSF in)  
(WOUNDS AND INJURIES,  
head, blood & CSF in)

U-5

USSR/General Problems of Pathology. Metabolism

Abs Jour : Ref Zhur - Biol., No 13, 1958, No 61087

Author : Mestachkina A. Ya.

Inst : -

Title : Biochemical Peculiarities of an Edema and Swelling in Cases of Cerebral Tumors

Orig Pub : Vopr. neyrokhirurgii, 1957, <sup>21</sup>No 2, 38-40

Abstract : In deceased cases of cerebral tumors, with manifestations of edema of the white matter, the following was observed: an increased water content, a decrease (based on raw tissue weight) of cholesterol content, of general and acid soluble P, general N and creatinine. There was also an absence of shifts and a slight decrease in the amount of residual N. In conversion to dry residue, the decrease in the concentration of these substances appeared less pronounced, and in several instances the contents of P and N in the affected cerebral hemisphere was higher than in the control area. -- L.S. Salyanov

Card : 1/1

MESTECHKINA, A.Ya.

Biochemical characteristics of edema of the cerebral tissue in brain tumors of varying histostructure. Probl.neirokhir. 4:261-275 '59.  
(MIRA 13:11)

(BRAIN--TUMORS)  
(EDEMA)

MISTECHKINA, A.Ya. [Miestechkina, A.IA]

Some chemical changes in tumorous brain. Ukr.biol.khim.zhur. 32  
no.3:387-393 '60. (MIRA 13:6)

1. Ukrainian Institute of Neurosurgery, Kiyev.  
(BRAIN--TUMORS)

KVIŦNITSKIY-RYZHOV, Yp.H. [Kvitnyts'kyi-Ryzhov, IU.M.]; MESTECHKINA, A.Ya.  
[Miestechkina, A.IA.]; SERGIYENKO, T.M. [Serhienko, T.M.]

Liquor pressure and the edema and swelling of the brain in experiments with increasing intracranial hypertension attended with inflammatory complications. Fiziol. zhur. [Ukr.] 7 no.1:101-106 (MIRA 14:1)  
Ja-F '61.

1. Ukrainian Research Institute of Neurosurgery, Kiev.  
(BRAIN-DISEASES) (HYPERTENSION)  
(EDEMA)

MESTEK, K.

"Bulk buying of potatoes."

P. 10. (Vestnik. --Prahá, Czechoslovaká.) Vol. 5, no. 1, 1958.

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5, May 1958

MESTENHAUSER, A.; GRABOVSKY, J.

"New Trends in the Production of Drugs of Vegetable Origin", P. 727,  
(ZA SOCIALISTICKE ZEMEDELSTVI, Vol. 4, No. 7-8, July/Aug. 1954, Praha,  
Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12,  
Dec. 1954, Uncl.

MESTER, A.

Data on the etiology of atrophy caused by Leiner's disease.  
Gyermekgyógyászat. 2 no. 10:294-302 Oct. 1951 (CINL 21:3)

1. Doctor. 2. Pediatric Clinic (Director--Prof. Dr. Odon Kerpel-Fronius), Pecs Medical University.

MESTER, A.; KADAS, L.

Functional and anatomical changes changes of the pancreas in Leiner's disease. *Gyermekgyógyászat* 3 no. 7:213-223 July 1952. (GLML 23:1)

1. Doctors. 2. Pediatric Clinic (Director -- Prof. Dr. Odon Kerpel-Fronius) and Institute of Pathological Anatomy (Director -- Prof. Dr. Bela Entz), Pecs University.

HORVATH, M.; MESTER, A.

Results of the modern therapy of pertussis. Orv. hetil. 93 no. 43:  
1229-1231 26 Oct 1952. (GLML 23:5)

1. Doctors. 2. Children's Clinic (Director -- Prof. Dr. Odon Kerpel-Fronius), Pecs Medical University.

MESTER, Antal, dr.; SZIGETHY, Gyula, dr.; RADNOK, Maria, dr.

Disorder of fat digestion in the Leiner's disease.  
Gyermekgyógyászat 5 no.12:364-367 Dec 54.

1. A pécsi Orvostudományi Egyetem Gyermekklinikájának (ig: Dr.  
Kerpel-Fronius Odon egyet. tanár) közleménye.  
(ERYTHRODERMA DISQUAMATIVUM, metab. in  
lipase)  
(LIPASES, metab.  
in erythroderma desquamativum)

KERPEL-FROMIUS, E.; WESTER, A.; SZY, S.; BARKA, I.; ZSAMAR, E.; KELAMEN, I.

Resorption of sugar and fat in experimental anhydremia and hypothermia. Acta med. hung. Suppl. 6 no.1:73-75 1954.

1. Kinderklinik der Medizinischen Universitat, Pecs.

(BLOOD

anhydremia, eff. on gastrointestinal resorp. of sugar & fat in hypothermia)

(GASTROINTESTINAL SYSTEM, physiol.

absorp. of sugar & fat, eff. of anhydremia & hypothermia in rats)

(BODY TEMPERATURE

hypothermia, exper., eff. on gastrointestinal absorp. of sugar & fat in rats)

(DEHYDRATION, exper.

eff. on gastrointestinal absorp. of sugar & fat in hypothermic rats)

(GLUCOSE, metab.

gastrointestinal absorp., eff. of anhydremia & hypothermia in rats)

(FATS, metab.

gastrointestinal absorp., eff. of anhydremia & hypothermia in rats)

KERPEL-FRONIUS, Odon, dr.; BARKA, Ilona, dr.; ~~MESTER, Antal, dr.~~; ZSAMAR,  
Erzsebet, dr.; SZY, Sandor, dr.; ~~KELEMEN, Ilona, dr.~~

The resorption in experimental anhydremia and hypothermia. Orv. hetil.  
95 no.47:1292-1296 21 Nov 54.

1. A Pecsí Orvostudományi Egyetem Gyermekklinika-janak (igazgató:  
Kerpel-Fronius Odon, dr. egyet. tanár) közleménye.

(FAT, metab.  
gastrointestinal absorp. in exper. anhydremia & hypothermia  
in rats)

(GLUCOSE, metab.  
gastrointestinal resorp. in exper. anhydremia & hypothermia  
in rats)

(BLOOD  
anhydremia, eff. on glucose & fat resorp. by intestines  
in rats)

(BODY TEMPERATURE  
hypothermia, exper., eff. on gastrointestinal glucose &  
fat absorp. in rats)

(WATER, in blood  
defic., exper., eff. on gastrointestinal glucose & fat  
absorp. in rats)

MESTER, Antal, dr.; SZIGETHY, Gyula, dr.

Incidence of congenital and acquired pancreatic function disorders in our clinic. *Gyermekegygyaszat* 7 no.2:63-64 Feb 56

1. A Pécsi Orvost. Egyetem Gyermek. (igaz. dr. Kerpel-Fronius Odon egyetemi tanár) közl.

(PANCREAS, dis.

in inf. & child, incidence of congenital & acquired disord.  
(Hung))

RADEK, Maria, dr.; SZIGETHY, Gyula, dr.; MESTER, Antal, dr.

Data on the problems of infantile atrophy. Orv. hetil. 97 no.  
14:376-379 1 Apr 56.

1. A Pécsi Orvostudományi Egyetem Gyermekklinika-jának  
(igazgató: Kerpel-Fronius, Odon dr.) közleménye.  
(INFANT NUTRITION DISORDERS, physiol.  
blood proteins & pancreatic enzymes, determ.,  
relation to kwashiorkor (Hun))  
(KWASHIORKOR, physiol.  
blood proteins & pancreatic enzymes, determ., relation  
to infantile atrophy. (Hun))  
(BLOOD PROTEINS, in various dis.  
kwashiorkor & infantile atrophy, determ. (Hun))  
(PANCREAS  
enzymes, determ. in kwashiorkor & infantile  
atrophy. (Hun))

MESTER, Antal, dr.

Fat absorption in infant dystrophy and marasmus according to studies on vitamin A load. Gyermekgyógyászat 10 no.12:362-364 D '59.

1. A pécsi Orvostudományi Egyetem Gyermekklinika (igazgató: dr. Kerpel-Fronius Odon egyet. tanár) és a Berettyóújfalusi J.T.Korháza (igazgató: dr. Mako Istvan) Gyermekosztálya (felelős: dr. Mester Antal) közleménye.  
(INFANT NUTRITION DISORDERS metab)  
(VITAMIN A metab)

MESTER, Antal; K.MAGY, Gabor; BARTHA, Ferenc

The problem of nutrition of infants with severe atrophy.  
Gyermekgyógyászat 11 no.11:344-349 H '60.

1. Jarasi Tanacs Korhaza, Berettyoujfalu. (Igazgato: Dr.Mako Istvan.  
(INFANT NUTRITION DISORDERS ther)

KATHINKA MALATINSZKY, Erssobot, dr.; ~~MANTOR, Antal, dr.~~

Our therapeutic and clinical observations during the most severe phase of Leiser's case with special reference to the administration of high doses of vitamin A. Orv. hetil. 106 no. 51:2419-2420 '65

• Berettyouifalvi János Turaco Korhaz, Gyermekosztaly (feorvos: Mantor, Antal, dr.).

MESTER, A.D.

Experience of the Bashkir Economic Council in shortening the  
time required to build petroleum refineries. Trudy MIEI no.15:212-  
215 '61. (MIRA 14:12)

1. Glavnyy inzh. upravleniya stroitel'stva Bashkirskogo sovnarkhoza.  
(Bashkiria--Petroleum refineries)

MESTER, E.

Surgical treatment of peripheral vascular disorders. Orv. hetil. 94 no.  
34:925-931 23 Aug 1953. (CMLL 25:1)

1. Doctor. 2. Bajcsy-Zsilinszky Hospital.

MESTER, Endre, dr.; ZARDAY, Imre, dr.

On ligation of inferior vena cava in decompensated heart disease.  
Orv. hetil. 95 no.41:1129-1131 10 Oct 54.

1. A Bajcsy-Zsilinszky Korhas (igazgato: Andics Gabriella)  
kozlemenye.

(CONGESTIVE HEART FAILURE, surg.  
inferior vena cava ligation)

(VENAE CAVAE, surg.  
ligation of inferior in congestive heart failure)

MESTER, Endre, dr.

\*\*\*\*\*

Successful surgery of the bifurcation of the aorta in a case of riding embolism. Orv. hetil. 96 no.29:802-805 17 July 55.

1. A Fovarosí Bajecsy-Zsilinsky korhas Sebészeti Ostalyanak Kozlemenye.

(EMBOLISM,

aortic bifurcation, surg.)

AORTA, diseases,

embolism of bifurcation, surg.)

MESTER, Endre, dr.

Surgical therapy of eventration of the diaphragm. Orv. hetil. 96  
no.41:1143-1145 9 Oct 55.

1. A Budapesti Bajcsy Zsilinszky Kórház (igazgató: Andics  
Gabriella dr.) Sebészeti Osztályának közleménye.

(DIAPHRAGM, abnormalities  
eventration, x-ray diag. & surg.)

(ABNORMALITIES  
diaphragmatic eventration, x-ray diag. & surg.)